



**AL AIN JUNIORS SCHOOL**  
**SUMMER VACATION HOLIDAY ASSIGNMENT**  
**GRADE 11**

**Subject: Biology**

**1. PROJECT-**

- Study of effects of fertilizers on the rate of growth of plants
  - Study competition between weeds and crops
  - Study of effect of antibiotics on microorganisms
  - Study of breaking of dormancy of seeds by  $KNO_3$ , ethylene and shoot elongation.
  - Study of deficiency symptoms of various essential elements and minerals..
  - Study of effect of light and gravity on plant growth movement
  - Study of effect of gibberellins on seed germination and shoot elongation.
  - Study of effects of herbicide on lawn seeds.
  - Study of dispersal of seeds by various agencies.
  - Comparative study of chlorophyll content in five different species.
  - .Study of adaptability of cockroach to drastic environment.
  - Study of developmental stages by housefly/cockroach.
  - Study of effect of osmotic stress by administration of hypertonic saline in frog.
  - Study of locomotion and role of different fins in fishes.
  - Study of zooplanktons from fresh water ponds and tank.
  - Estimation of Vitamin-C content in different types of fruits
  - Harmful effects of mobile radiation in plants and animals.
  - Effect of alkaline and acid in bacterial growth.
- \* Effect of fertilizers ,manures and poythene on the rate of elongation of hypocotyls.
- \* Factors affecting nodule formation in legumes.

**1. Record Work**

**CHEMISRTY**

PREPARE A PROJECT FILE AND PPT ON ANY ONE OF THE FOLLOWING TOPIC

SUBMISSION DATE : 3<sup>rd</sup> Sept 2019

Presentation by students: 4<sup>th</sup> , 5<sup>th</sup> and 6<sup>th</sup> September 2019

**TOPIC: 1**

1. The chemical difference to our bodies in choosing organic foods over foods treated with pesticides
2. Analyze the chemicals that are involved in different types of food allergies
3. Analyze the chemical changes that occur using different cooking ingredients for different foods
4. Importance of chemistry in everyday life



## TOPIC : 2 (MANDATORY)

PPT ON ENVIRONMENTAL CHEMISTRY

TOPIC TO BE INCLUDED: i) Air Pollution, ii) Soil Pollution iii) Water Pollution

## COMPUTER SCIENCE

Python program to make Rock-Paper-Scissor game.

## CORE ENGLISH GRADE 11 A & B

- A. Read at least two novels of your choice and write the review in about 150 words each.**
- B. Daily listen to BBC or any other news (English) and enhance your listening skills.**
- C. Daily read at least for half an hour any one of the English newspaper.**

1. Download the passages from CBSE site and practice Note making, summary writing and reading passages.  
[www.cbse.nic.in](http://www.cbse.nic.in) ( 2 each )
2. Write a letter to the Standard Book Co., Mumbai, complaining about poor quality of books supplied to your library. You are Mohan/ Mohini, Librarian of Lajpat Rai Secondary School, Mumbai.
3. Write a letter to the Editor of “The Times of India”, Delhi, expressing your concern over the increase in the road accidents, rash driving, and suggesting ways to curb the accidents. You are Nandita/ Naveen of Jawahar Nagar, Delhi.
4. Write an article in not more than 200 words on the problem of increasing water scarcity problem in India. Suggest a few remedies so conserve water.
5. Write a speech in about 200 words discussing the uses and abuses of the internet by youth, giving suggestions how it can be a valuable tool for national progress and for promoting international understanding.
6. Write a poem and a story on the theme “TOMORROW”. For details visit the website [www.elfdubai.org](http://www.elfdubai.org)

## ISLAMIC

Prophet Muhammad’s (SAW) behavior with Enemies and Animals. (Examples, Benefits, and Lessons for Human being)

Elaborate above topic in 500 or more words.

## PSYCHOLOGY

### PROJECT – CASE STUDY ON ANY PSYCHOLOGICAL DISORDER.

#### INSTRUCTIONS:

1. The students shall be required to undertake one project during vacations.
2. Students have to choose any one psychological disorder from Chapter 4th- Psychological disorders of the textbook.
3. Some of psychological disorders to be selected are Anxiety disorder, somatoform disorder, dissociative disorder, mood disorder, substance abuse etc.
4. Students should prepare a case study on real life client who are suffering from any of above disorder

#### The project would involve the use of different methods of enquiry and related skills

##### The format for the project work will be:

1. Introduction
2. Details of selected disorder
3. Causes
4. Identification of data
5. Case history of client
6. Use of psychometric tests
7. Data analysis
8. Conclusion
9. Bibliography

## MATHS

Summer vacation is the best time to make you strong in the topics covered. Planned study along with enjoyment will be the best solution. When the school reopens after vacation you will be occupied by new lessons.

Plan yourself and complete the following tasks and submit the work on the first day of school after the vacation.

As discussed in the class the holiday .

1. Solve all the miscellaneous exercises of the concluded chapters.
2. Solve five questions of each chapter from any reference book like R.D.Sharma  
or Exam idea, or ML Aggarwal or any other book.
3. If anyone wants to be more perfect solve 5 questions of each chapter from NCERT exemplar text book.

## PHYSIC

1. Plan to go to a place by a vehicle. Take readings of odometer and speedometer after every 2 minutes till you reach your destination. Record these observations in tabular form.



Plot distance – time and speed – time graphs. State whether this motion is uniform or non- uniform.

2. Collect information about Galileo and Newton about their contribution in understanding the motion of objects